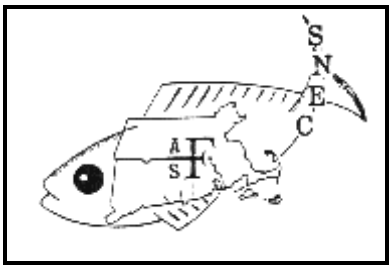

AMERICAN FISHERIES SOCIETY
SOUTHERN NEW ENGLAND CHAPTER
NEWSLETTER

April 1994
Volume 3, Number 1

PRESIDENT'S MESSAGE

This year as President of the Chapter has really flown! It seems as though I just finished my comments for the fall newsletter and in three months I will be stepping down from the Presidency.

This period presented some interesting challenges. First, I moved into a managerial position within Northeast Utilities. This position requires that I deal with the many regulatory issues facing NU. As a result I have not been involved with fisheries issues since November and have been focussed intensively on learning my new job requirements. In addition, I was assigned to a special NU task force in January and I found I could not devote as much energy to Chapter activities as I had originally planned.

Second, we lost the benefits of an enthusiastic and capable President-Elect when Dan Hayes accepted a position in Michigan. We will miss him. However, Rick Jacobson and Bill Hyatt are pitching in to complete Dan's term of office. This means that Secretary-Treasurer Martha Mather will ascend to the President's office at our June meeting and we will then elect two new officers: President-Elect and Secretary-Treasurer.

At the June meeting, the membership will also vote on changes to the Chapter's By-Laws. Several are minor changes in wording that will clarify the meaning. Others incorporate the fact that the Parent Society now forwards to us dues collected from Chapter members. The most significant change describes the Chapter Board of Directors and their duties. The Board of Directors worked hard to resolve various opinions on the changes. A copy of the proposed changes was available at the December meeting. If you weren't there or misplaced your copy, let me know and I will send you a copy of the proposed changes.

As we did last year, the Board will send you a proxy for the upcoming election. It will also contain an option to vote on the By-Law changes. If you won't be at the meeting, please take time to vote and return your proxy. Mail-in ballots will be added to those collected at the meeting, giving everyone the opportunity to have input to the Chapter.

I look forward to seeing you at the June meeting.

- Linda Bireley

Editor's Note: Linda Bireley's address and telephone numbers are: Northeast Utilities, P.O. Box 270, Hartford, CT 06141-0270, phone (203) 665-5448, fax (203) 665-5896.

UPCOMING SNEC MEETING

The summer meeting of the Southern New England Chapter will be held on June 8, 1994 at Corless Auditorium on the Bay Campus of the University of Rhode Island, Narragansett, RI. The meeting will include the annual Chapter business meeting, where an important vote on the Chapter by-laws will be conducted. The technical sessions will feature a mini-theme session on risk assessment associated with contaminants in fish. The pre-registration package for the meeting will be mailed by mid-May. Contact Brian Murphy at

(203) 344-2115 for further information.

SNEC WINTER MEETING SUMMARY

The Southern New England Chapter held its winter meeting on December 8, 1993 at the University of Connecticut in Storrs, CT. Approximately 75 members attended the meeting which included technical presentations and posters on a diversity of freshwater and marine topics. A theme session and panel discussion on habitat suitability index modeling was included in the program. Speakers in this session were Brian Murphy-CT DEP, Mike Ludwig-NMFS and Rick Jacobson-CT DEP. A mini-workshop on practical applications of stratified random sampling focused on anadromous and stream fishes followed the technical sessions. About half of the meeting attendees participated in this informal discussion led by Dan Hayes-NMFS. Feedback on the mini-workshop was positive, suggesting that this format should be further explored at future meetings.

Rick Jacobson and Mike Ludwig were principal speakers during the habitat suitability index modeling session of the SNEC winter meeting.

EDUCATION COMMITTEE UPDATE

The SNEC Education Committee has been involved in several initiatives:

Janis Burton and Laura Katan explored the electronic classroom medium through the auspices of the Massachusetts Corporation for Educational Television (MCET) and reported on the benefits of communicating directly through satellite technology with students to answer their questions relative to a videotaped presentation. Don Flescher and Brian Kelly set up a meeting between Jack Kelly of NOAA and Randy Fairbanks of the Massachusetts Division of Marine Fisheries to discuss mutual education interests. Chuck Phillips visited an urban school system to examine the need for hands-on environmental education materials and attended the education session at the Northeast Fish and Wildlife Conference.

The Committee developed a Science Fair package to encourage participation by members attending the December meeting and proposed creating a three facet display to explain the roles of AFS and the Southern New England Chapter in the educational process which could be displayed at conferences and workshops.

A number of Committee findings are of note:

1. There are many environmental education curricula available.
2. Teacher training and commitment is vital to environmental education success.
3. Marine fisheries and urban fishing education programs are in their infancy in our region; there is a demand but a short supply.
4. Our Education Committee can be a very valuable communication link between environmental education suppliers and user groups.
5. In urban schools, Project WILD has received mixed reviews. More successful schools have developed an ecosystem approach. Project HOME will serve in the future as a "hands on" adjunct for Project WILD.
6. Bilingual materials are important in many schools. Hispanic and Asian origin students with cultural connections to fishing are particularly interested in environmental curricula.
7. Water chemistry efforts by student volunteers

have expanded throughout the southern New England region.
8. Satellite technology can provide fisheries professionals direct access to many schools simultaneously.
9. Students need a "hands on" problem solving approach for full environmental education success.

The Committee will continue to develop contacts throughout the educational community and develop strategies for fisheries professional involvement in the environmental education process.

- Chuck Phillips, Chair
Education Committee

SNEC AFS STUDENT MEMBER INITIATIVES

A major aim of the SNEC AFS is to encourage student participation. To accomplish this, two initiatives were begun by the Chapter. One is the annual "Best Student Paper Award." This is $100 award and certificate given at our June business meeting to the author of the best student paper presented at that meeting and/or the preceding December meeting. The judging of the best student paper is done by members of the Professionalism Committee and members at large using a standardized scoring form to judge the papers. A second initiative passed by the Chapter members at the 1993 business meeting was to pay AFS certification costs for student members who presented a paper at the Chapter meeting. Students who participate would be given a reasonable time period after their presentation to finish any course work needed for certification.

Recently the SNEC AFS Board of Directors discussed sponsoring memberships for students attending school in southern New England to encourage student participation in AFS. This initiative will be brought before the membership for a vote at our June business meeting thus members are asked to think about this proposal and also the mechanisms for selecting students.

Any SNEC AFS member interested in nominating a Chapter member for the "Award of Excellence" is encouraged to do so and may contact me. Also, if any member is interested in judging the Best Student Paper Award, please do not hesitate to call. I can be reached at the Northeast Utilities Environmental Lab at (203) 447-1791 (ext 5038).

- Chris Gauthier, Chair
Professionalism Committee

MEMBER NEWS/MIGRATIONS

Dan Hayes has left the National Marine Fisheries Service, Northeast Fisheries Science Center, Woods Hole for a position with Michigan State University.

Cheryl Ryder has been hired to be a hydroelectric relicensing specialist for the Vermont Fish and Wildlife Department. She is based at the central office in Waterbury and is assisting on projects on the Clyde River and Deerfield River, among others. She was recently at NMFS, Woods Hole.

New regular AFS members in the Southern New England area since the last newsletter (October 1993-March 1994) are:

Lois J. Bendokas - Block Island, RI
Priscilla M. Brooks - Kingston, RI
Rebecca J. Jones - Bristol, RI
Douglas N. Kartono - Holden, MA
Kate R. Lindner - Narragansett, RI
James T. Raffin - Marlborough, CT
Timothy F. Sheehan - Woods Hole, MA
Terrence P. Smith - Woods Hole, MA
Roxanna Smolowitz - E. Falmouth, MA
Jennifer Specker - Kingston, RI
John Sweeney - Stony Creek, CT
Leonard I. Zon - Boston, MA

New student members since the last newsletter are:

Chris G. Buerkett - Sunderland, MA
Sean C. Burke - Westford, MA

Jimmie R. Bybee - Sunderland, MA
Gino Guimarro - Canaan, CT
Christopher Pratt - Narragansett, RI
Eric John Theiss - Turners Falls, MA
Erik H. Williams - Wakefield, RI

PROGRAM COMMITTEE HELP WANTED

The SNEC Program Development Committee is seeking to recruit two new members. The Committee's primary responsibility is to develop and organize the semi-annual meeting program. If interested, please give the Committee Chair, Brian D. Murphy a call at (203) 344-2115.

SNEC Program Committee Chair Brian Murphy organized the habitat suitability index modeling session of the SNEC winter meeting.

HOST FOR 1998 AFS MEETING?

The 1998 AFS annual meeting is scheduled to be held within the Northeastern Division geographic area. The Southern New England Chapter may have an opportunity to host this meeting if a location in CT, MA or RI is selected. This would be quite a challenge to the SNEC membership, since the host chapter typically contributes significantly to the success of the meeting. Contact Linda Bireley at (203) 665-5448 for further information or comments.

EXPLORATHON

The American Association of University Women (AAUW) and the Association for Women in Science (AWIS) are sponsors of the EXPLORATHON program. The purpose of the program is to demonstrate to young girls that they can pursue careers in science and math, and that these careers can be rewarding and fun. Workshops held in middle and high schools typically include sessions led by women scientists focused on particular career options. If you are interested in participating in these types of programs, contact you local chapter of the AAUW or the local AWIS. National offices are: AAUW, 111 16th Street NW, Washington, DC 20036-4873; and AWIS, 1522 K Street NW, Suite 820, Washington, DC 20005.

- excerpted from EEO Section Newsletter, Autumn 1993

ALTERNATIVES TO LEAD SINKERS

On March 9, the Environmental Protection Agency (EPA) released a proposed rule which, if approved, will ban the manufacture, sale, and distribution of nearly all sinkers currently used by recreational anglers. Arguing that lost and discarded lead fishing sinkers pose a health threat to waterfowl and other birds, the EPA initiated the action under authority granted through the Toxic Substances and Control Act. The action was based on mounting evidence that waterfowl are ingesting fishing sinkers and dying of lead toxicosis. In a Tufts University School of Veterinary Medicine 1992 study of mortality of common loons in New England, many of the loons had ingested lead fishing sinkers and appear to have died of acute lead poisoning.

Many substitutes to lead sinkers are available in the U.S. market today. One is a tin split shot made by Dinsmores, which is the most popular

substitute in England where lead sinkers have been banned since 1987. In Canada, Bi Logic Tackle has produced an "environmentally friendly fishing sinker" made from bismuth, which is over 99 percent lead-free. In the U.S., Walter Gremlin, Inc. (which has over 80 percent of the lead sinker market), is merchandising "environmentally friendly unleaded fishing sinkers" made of tin for split shot or a plastic compounded with iron and tungsten for swivel sinkers, egg sinkers, and needle nose worm weights.

The EPA will accept comments on the proposed ban through May 9, 1994. Copies of the proposed rule can be obtained from the EPA at (202) 554-1404 and comments, in triplicate, should be submitted to: TCSA Docket Receipt (7407), Office of Pollution Prevention and Toxics, Room E-G99, 401 M Street SW, Washington, DC 20460, Attention Docket No. 62134.

- excerpted from SFI Bulletin Mar/Apr 1994 and Atlantic International Chapter AFS Newsletter, Feb 1994

ECOSYSTEM APPROACH TO FISH AND WILDLIFE CONSERVATION

Early in March the U.S. Fish and Wildlife Service launched a major outreach effort to acquaint all employees, cooperators and interest groups with progress to date in charting a new ecosystem approach to fulfilling its fish and wildlife conservation mission. "This is the first step in a journey we think is worth taking," said Service Director Mollie Beattie. The ecosystem approach is defined as "protecting or restoring the function, structure, and species composition of an ecosystem, recognizing that all components are interrelated." Nationwide, 52 ecosystem units based on watersheds are proposed. According to Director Beattie, the Service's ecosystem approach "represents a new way of managing natural resources that takes into account the entire ecosystem and balances recreational use, economic development, and conservation of wildlife so that each is sustainable."

- excerpted from USFWS Fish and Wildlife News, April 1994

PAWCATUCK RIVER COOPERATIVE AGREEMENT

The Rhode Island Department of Environmental Management, Division of Fish, Wildlife, and Estuarine Resources and the U.S. Fish and Wildlife Service, Connecticut Department of Environmental Protection, Fisheries Division, and the National Marine Fisheries Service have signed a five-year Cooperative Agreement for the restoration of anadromous fisheries resources, including Atlantic salmon and alosids, in the Pawcatuck River. A Technical Committee has been formed to coordinate activities and to consult on technical matters relating to the restoration program. The Committee will hold its first meeting in May at the North Attleboro National Fish Hatchery.

- Jan Rowan

ATLANTIC SALMON HAPPENINGS

The U.S. Fish and Wildlife Service and the National Marine Fisheries Service have begun a joint study to determine whether U.S. populations of sea-run Atlantic salmon in New England should be listed as threatened or endangered under the Endangered Species Act. The action came after a review of a petition that introduced information on current and historical Atlantic salmon populations and identified possible threats. Based on review of the petition and other available data, the agencies believe listing may be warranted. The agencies are now thoroughly reviewing all pertinent information to ensure that the study is complete and based on the best scientific data. A decision on whether to initiate listing procedures will be made by October 1994.

The Craig Brook National Fish Hatchery recently received an additional $272,000 which will enable the U.S. Fish and Wildlife Service to construct a receiving building for screening incoming Atlantic salmon eggs and broodstock in a multi-river specific propagation program in Maine. This is the first phase of proposed construction at that facility. The second phase of the FWS proposal, which is not yet funded, involves designing and constructing a hatchery isolation building. The building will house multi-year classes of Atlantic salmon from up to ten separate river systems in isolation to minimize disease transmission and to ensure genetic integrity. Both buildings are critical to a biologically sound multi-river specific stocking strategy, but they are especially critical given that the Atlantic salmon in five rivers in Maine are already listed as Category 2 species under the Endangered Species Act.

- Jan Rowan

NMFS GROUNDFISH STUDIES INITIATED

United States and Canadian scientists are conducting a cooperative tagging study of important groundfish species, especially Atlantic cod, on Georges Bank. "The study will increase our understanding of the movement, distribution and stock identification of groundfish species on Georges Bank. It will also add to results from similar studies. The most recent U.S. tagging study on Georges Bank was conducted in the 1950's," said Frank Almeida. Almeida, with NMFS, Northeast Fisheries Science Center at Woods Hole, is U.S. coordinator of the study. The Canadian coordinator is Joe Hunt of the Canadian Department of Fisheries and Oceans in New Brunswick. Joint tagging operations are expected to result in 7,500 fish being tagged with "T" tags. Prior tagging studies by the U.S. in the 1950's and the Canadians in 1985 showed that Atlantic cod tagged on Georges Bank tended to stay on the Bank. Contact: Frank Almeida at (508) 548-5123.

NMFS is also coordinating a trawl research project (experimental fishery) on the northeast section of Georges Bank. The objective is to evaluate whether a productive cod fishery can be conducted in this area with little or no bycatch of haddock. Two trips have been conducted with NMFS observers aboard, and more are underway. The NMFS Sea Sampling Program and the Northeast Fisheries Science Center are also contributors to this study. Contact: John Kenney at (401) 789-3346.

NORTHEAST FISHERIES MEETING

Executive Director Paul Brouha represented AFS at a January 14, 1994 meeting in Boston on the status of marine fisheries in New England. The meeting included sessions featuring academic institutions, regional/local environmental organizations, education/research organizations, national environmental organizations, community foundations, and marketing associations. Several strategies to restore groundfish stocks while preserving the fishing and processing sectors of the region were discussed. One that Paul suggested AFS might support is the creation of a Marine Resource Revolving Fund initially funded by federal appropriations, but ultimately replenished from user fees, marine diesel fuel taxes and landings taxes. The fund would be used as directed by fishing industry renewal boards to maintain the necessary full-time fleets, processing plants, and workforce to benefit from the restored resource base. Specifically, funds would be used for income insurance/assistance, retaining and adjustment assistance, license retirements, buyouts and early retirements, fisheries research (biological, social and economic) and fisheries management. Eventually, when profitability returns to the fishery, the Fund would be used to buffer the socioeconomic impact attendant to natural variation in stock productivity, to manage the fisheries, and to return a fair economic rent to the people of the United States who own the resources and who "grubstaked" the recovery. Any comments on this idea or any other strategies that AFS could be involved in should be brought to

the attention of John Boreman, President-Elect, Marine Fisheries Section.

CLAM LEUKEMIA DISCOVERY

A cooperative research project between the University of Rhode Island and Yale University has provided a possible answer to the cause of clam leukemia. The findings may shed light on the cause of some forms of human leukemia, as well. Pei Wen Chang and Daniel Medina identified an enzyme unique to the family of retroviruses, reverse transcriptase, in diseased clams. This indicates that the causative agent of clam leukemia is a retrovirus - a virus from the same family as the human HIV virus that causes AIDS. For further information, contact Dr. Chang at (401) 792-2943.

RECENT PUBLICATIONS

The published proceedings of the Fish Passage Policy and Technology Symposium sponsored by the AFS Bioengineering Section are now available. The 2-day symposium was part of the 1993 annual AFS meeting in Portland, OR. Thirty papers presented policy, planning and current technologies of upstream and downstream fish passage. The policy, planning and management section includes discussions of special passage considerations for endangered species, history and success of fish passage mitigation, inventory of fish passage needs, the development of fish passage policy and ecological effects of fish passage over natural barriers. The upstream fish passage technologies section reviews current technologies in many regions of the world, upstream juvenile fish passage and the evaluation of fishways. The downstream fish passage technologies section discusses understanding and designing for fish behavior, the impact of facility design to the control of predation and recent developments in new fish screening concepts including the Eicher and MIS screens. The proceedings of this symposium are available from the Bioengineering Section for $20 per copy including postage and handling. To order, send your request with a check, money order, or purchase order to: Greg Kindschi, AFS Bioengineering Section, 4050 Bridger Canyon Road, Bozeman, MT 59715.

The abstracts of the 1994 Striped Bass Study workshop are now available. If you are interested in receiving a copy please contact: Gary Shepard, NMFS, 166 Water Street, Woods Hole, MA 01543; or Connie Young-Dubovsky, USFWS, 4401 N. Fairfax Drive, Room 840, Arlington, VA 22204; or John Field, ASMFC, 1776 Massachusetts Ave NW, Suite 600, Washington, DC 20036.

Distribution and Abundance of Fishes and Invertebrates in Mid-Atlantic Estuaries, the twelfth report from NOAA's Estuarine Living Marine Resources program, now available. This report presents information on the spatial and temporal distribution , and relative abundance of

61 fish and invertebrate species in 22 estuaries along the Atlantic coast from Virginia to Massachusetts. A similar report covering 58 species in 17 North Atlantic estuaries (Massachusetts to Maine) will be published in May 1994. Reports are available free of charge from David M. Nelson, NOAA N/ORCA 14, SSMC-4 9th Floor, 1305 East-West Hwy, Silver Spring, MD 20910 (301) 713-3000 ext. 182.

The NMFS Northeast Fisheries Science Center has prepared a history of the Martha's Vineyard (MA)-based portion of the East Coast swordfish fishery, from its inception in the early 1800's to the present. Until the mid-1900's, about one-third of the east coast swordfish fleet used Martha's Vineyard as home port. Most fishermen caught their fish on Georges Bank or off Canada during summer. They harpooned the fish after spotting them from the masts of their vessels. This historical account is based largely on interviews with fishermen, and is illustrated with photographs of the people and vessels participating in the fishery. Contact: Clyde L. MacKenzie, Jr. at (908) 872-3019.

MEETINGS

A conference, "Evolution and the Aquatic Ecosystem: Defining Unique Units in Population Conservation," co-sponsored by AFS will be held May 23-25, 1994 in Monterey, CA. This conference will focus on ways in which the scientific and management communities can understand subunits of fish species for conservation purposes. Contact: Christine Gan or Cindy Carpanzano, University of California, Berkeley (510) 642-7525.

Don't forget the Southern New England Chapter meeting on June 8! See page 1.

The 124th AFS annual meeting will be held August 21-25, 1994 at the Sheraton Hotel and World Trade Centre, Halifax, Nova Scotia. The meeting theme is "Managing Now for the 21st Century: Food, Recreation, Diversity." Contact: Paul Brouha, AFS (301) 897-8616.

Trout Unlimited Canada is sponsoring the "1994 International Trout Stream Habitat Improvement Workshop" to be held in Calgary, Alberta, Canada, September 6-9, 1994. The workshop will feature two days of field tours highlighting stream and riperian habitat projects on a variety of Alberta's streams and rivers. Contact: Garry Szabo, TU Canada (403) 221-8365.

A Flatfish Biology Workshop will be held on December 6-7, 1994 at the Ramada Inn, Mystic, CT. Formerly concentrating on the winter flounder, this workshop is the fourth in a series that began in 1986. Biologists with an interest in flatfishes are invited to discuss their activities with other scientists at this forum. Special emphasis is placed on the relationship between flatfish biology and natural or anthropogenic stress. Topics for papers or posters may include growth, reproduction, physiology, biochemistry, pathology, immunology, life history, behavior and movements, environmental effects, and habitat issues. A call for papers will be issued soon. For more information regarding this workshop or to be placed on the mailing list, please contact Dr. Anthony Calabrese, National Marine Fisheries Service, 212 Rogers Avenue, Milford, CT 06460 (203) 783-4240.

AFS ON COMPUSERVE

AFS is online with its own section on the Earth Forum on CompuServe. Join us by taking advantage of a free sign-up package which includes $15 worth of free connect time. To join call (800) 848-8199, select voice mail option to speak with an operator, as for representative 190 to request the free CIS subscription, courtesy of Earth Forum.

Take advantage of the ability to talk to AFS members anywhere at low cost. In your signup package you will get information on a local phone number for access and instructions for signing up. Once you get online, type GO EARTH at any

prompt. Joe Reynolds, the AFS System Administrator, at (301) 897-8616 will be happy to answer any questions you may have.

FROM THE EDITOR

Keep those news items coming, thanks! This newsletter is being uploaded to the CompuServe Earth Forum library described above, so your articles will get a broader distribution than the southern New England area. The deadline for submission of materials for the next newsletter is September 15, 1994. Ron Essig, U.S. Fish and Wildlife Service, 300 Westgate Center Drive, Hadley, MA 01035, telephone (413) 253-8504, fax (413) 253-8487.